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Ontario Department of Education

To

Teachers of Agriculture

IN

Public and Separate Schools

SCHOOL GARDENS
POTATO PLANTING IN SOD

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TO THE TEACHERS OF AGRICULTURE

School Gardens for Ontario

To manage school gardens with profit in the conditions now existing in the rural schools of Ontario will require a good deal of study. Teachers will need some assistance and much encouragement on the part of parents, Boards, and Inspectors. Many difficulties arise at the very commencement, because there is a good deal of misconception in regard to the character and scope of school garden work. Many of the rural school grounds are too small or are otherwise unsuitable, and teachers are at a loss to know what to do, with the result that nothing is done. To assist in the matter of planning the grounds and locating the plots, the following paragraphs and plans are given:

The first plan is intended to be suggestive for a small rural school with about twenty or twenty-five pupils in attendance and with about twelve pupils in the classes in Agriculture. It is so arranged that the garden lies along one side, occupying the minimum of school ground with the maximum in actual garden use. Economy of space should be an important consideration. To occupy more land than is necessary is, to a large extent, wasteful. If the garden is to be ploughed by the aid of horses, it should be long and narrow, and not square. It is impossible to plough up a small, square area without tramping the ploughed ground with the feet of the horses in turning, and the ploughing requires a much longer time. There should be a space allowed at the ends for turning. These matters have been considered in laying out these plans.

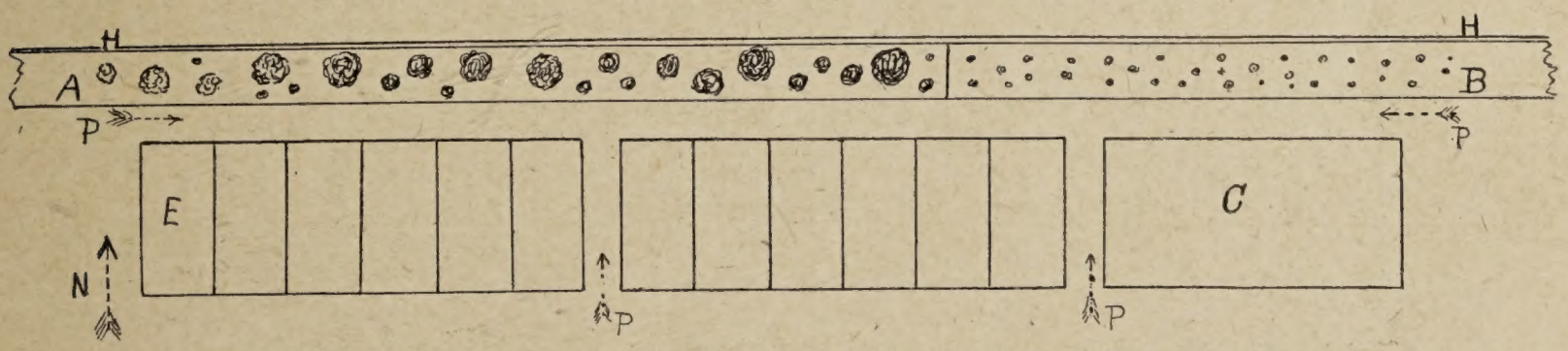

Diagram 1.—H H represents a fence on the north side of the school grounds; A, perennial plot, 3 feet wide; B, plot for wild flowers; C, community plot for experiments; E, individual plots, 8 by 4 feet; P, paths, 2 feet wide. Space economized. Drawn to scale.

It will be noticed that in the first plan there are no paths between the "beds". To a certain extent paths are waste land, and they require labour to keep down the weeds. It may be necessary in weeding to walk on the

beds between the rows of plants, but this need not cause trouble or injury, as the work is all done by hand or with a hoe.

The space for perennials is a permanent plot and is in a suitable place along the fence. The work for this is done with hoe, rake, and digger, to kill weeds and to keep the surface pulverized. This perennial plot may contain a great variety of such plants as Peonies, Golden-glow, Rose bushes, Tulips, and Phlox.

A portion of the area along the fence should be set apart for spring wild flowers, such as Trillium, Spring Beauty, Blood-root, Dutchman's Breeches, Adder's-tongue, Phlox, Wild Geranium, Pepper Root, etc. The spring wild flowers are vanishing rapidly, far too rapidly, because the woods have been cleared away, and their native homes have been taken over for crops. It would be a wise move on the part of the teacher to invite the pupils to preserve such plants in the "wild garden" at the school. Pupils are always eager to gather flowers in spring, and advantage should be taken of their zeal to secure plants, root and all, for the school plot. In this way the pupils can be trained to save the wild flowers. By all means available the wild flowers should be saved, and the schools can help as suggested above.

Of the three plans given, the first is most readily adapted to the average rural school. It can be extended as required, either by enlarging the plots or by increasing the number, as may be needed. All three plans, however, are simple, and each sets forth a type which may be the basis of further development.

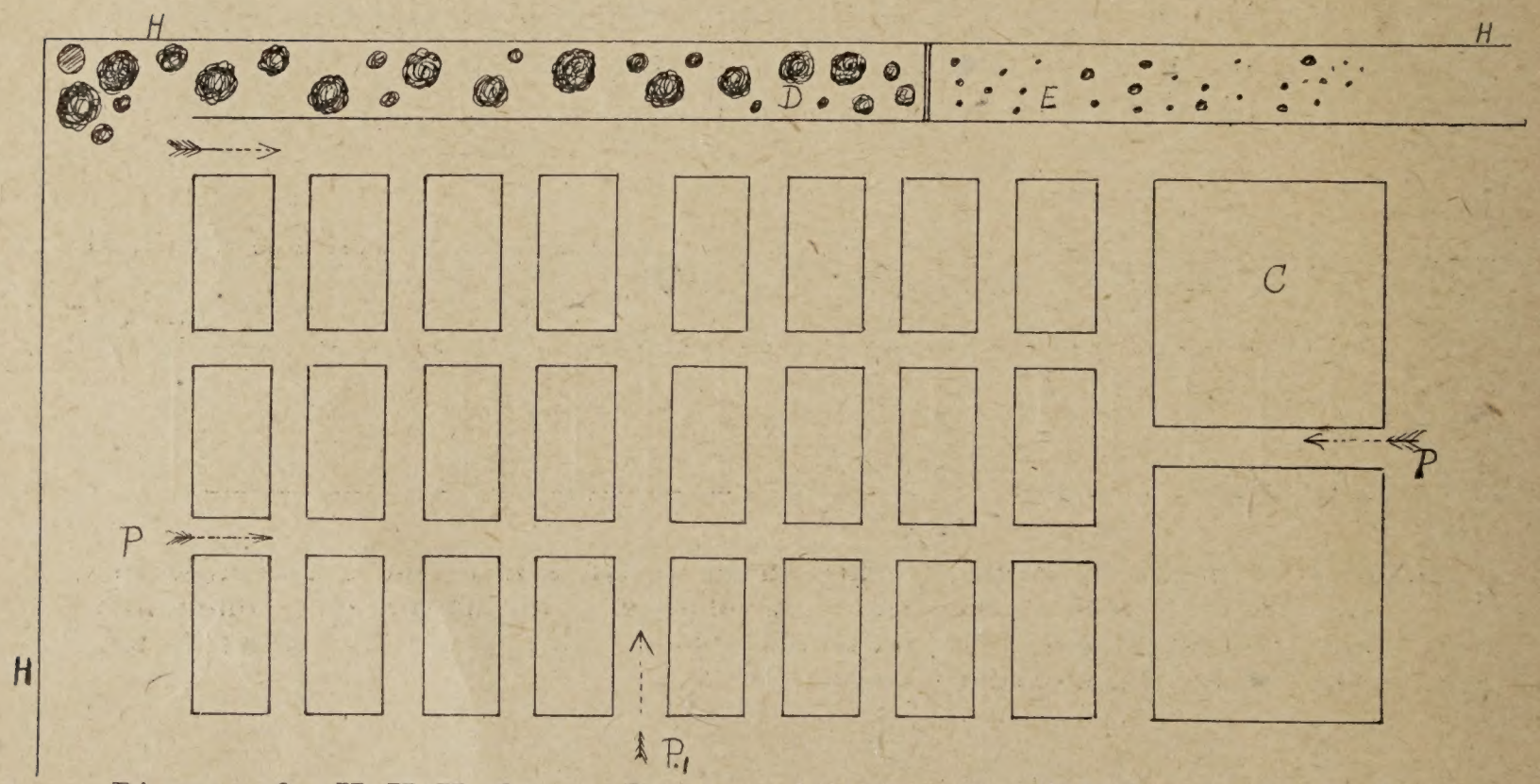

Diagram 2.—H H H, fence; D, perennial plot; E, wild flowers; P, paths, 2 feet wide; P.1, 3 feet wide; C, connected plots, 24 individual plots, each 8 by 4. This plan requires too much space for paths. Drawn to scale.

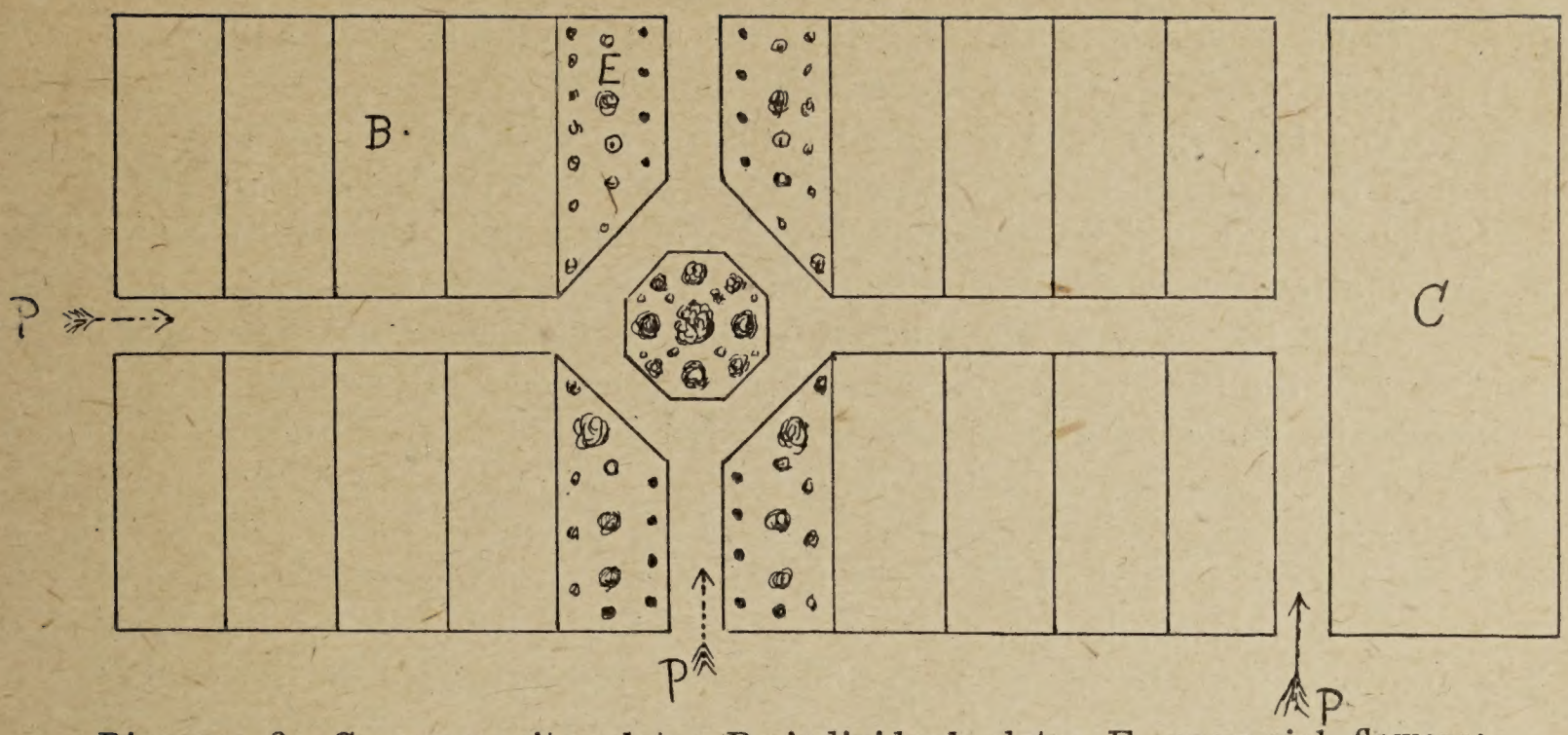

Diagram 3.—C, community plots; B, individual plots; E, perennial flowers; P, paths, 2 feet wide, with an ornamental bed in the centre. This is suitable for either an open space or a corner of grounds. Space economized. Drawn to scale.

Planting Potatoes in Sod

Many of the vacant lots to be used for the production of potatoes in 1917 are now lying in "sod", and, unless care is taken and knowledge applied in planting the crop, much unnecessary labour may be expended.

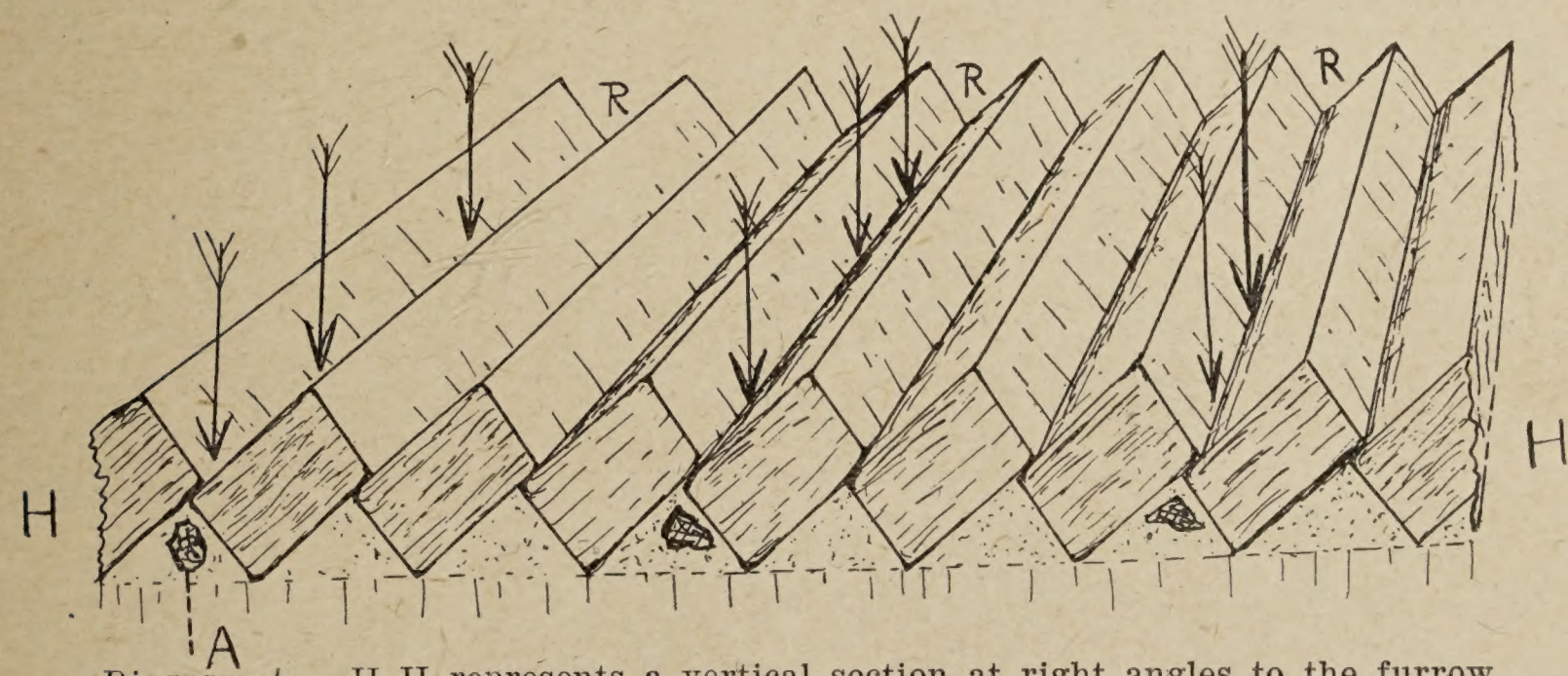

Diagram 4.— H H represents a vertical section at right angles to the furrow of a portion of ploughed sod field, and shows the sods lying one against another with a trough in the surface, and a hollow space underneath. As the plough cuts a furrow, say, 11 inches wide, the rows (R R) of potatoes will be 33 inches apart. A, represents a "seed" potato in position after planting. The arrows indicate where holes should be made (about 14 inches apart in the row) by forcing a stick like a hoe handle into the ground between the sods, into which holes the seed is dropped.

Many people have the idea that the sod should be thoroughly torn up before planting; this, however, is not necessary.

The land should be ploughed carefully at the time of planting, or a few days before, about 11 inches wide and 6 or 7 inches deep, and, if there is grass of considerable length on the sod, it should be drawn in by attaching a chain to the coulter while ploughing.

After the land is ploughed it will have somewhat the appearance shown in the illustration, though with edges less sharply defined. Holes should be made with a stick as indicated by the arrows (easily done because the ground is hollow underneath) and a "set" dropped into each hole. A little soil should be placed on the top of the "set" with a hoe or even with the heel of the boot. After planting, the land should be left in this condition until the potato plants are just making their appearance through the ground. Then the ground should be thoroughly harrowed, first lengthwise or diagonally, then crosswise. This cleans the ground of weeds. No more cultivation is needed until it is time to run the scuffler through. If the ploughing has been well done, the rows will be straight; for the potato sprout comes up quite readily, following the line of least resistance between the sods.

The foregoing description applies only to sod stiff enough to hold together without being broken up by the mould board of the plough. As this plan of procedure shows, there is no more labour required to manage a sod field than loose ground. Moreover, sod makes an excellent ground for potatoes when managed properly, no fertilizer being required. (See diagram 4.)

Toronto, March 9th, 1917.